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ON THE PROCESSES FOR THE PRODUCTION OF

EX LIBRIS

(BOOK-PLATES)

John Vinycomb

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Harvard College Library.

FROM THE

LUCY OSGOOD LEGACY.

"To purchase such books as shall be most needed for the College Library, so as best to promote the objects of the College."

Received 21 Dec., 1894.

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ON THE PROCESSES FOR THE PRODUCTION OF

EX LIBRIS

(BOOK-PLATES)

HARVARD UNIVERSITY LIBRARY

By John Vinycomb, M.R.I.A.

Fellow of the Royal Society of Antiquaries of Ireland
President of the Belfast Art Society, 1891-92
Member of Council of the Ex Libris Society

Reprinted from the Journal of the Ex Libris Society with additional illustrations.

LONDON:
A. & C. BLACK, Soho Square
1894

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HARVARD COLLEGE
LIBRARY.

Lucy Osgood Lunt

TO

ARTHUR VICARS, F.S.A.,

ULSTER KING OF ARMS

A VICE-PRESIDENT OF THE EX LIBRIS SOCIETY

AND AN EMINENT COLLECTOR

I RESPECTFULLY DEDICATE

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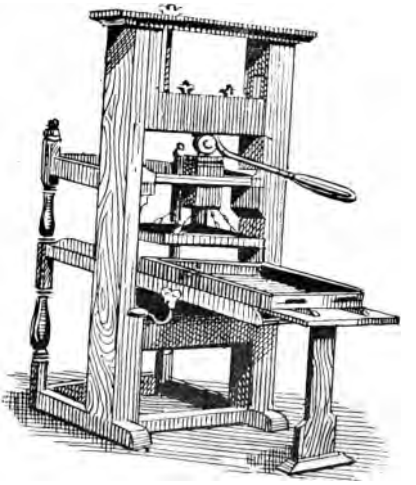

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PREFACE.

In acceding to the author's request that I would add a few words of introduction to these reprinted articles, I do so with pleasure, although entering a mild protest thereon, inasmuch as the writer has handled his subject so well that it leaves very little to say, except in commendation of the work to the favourable consideration of those for whom it was written.

Mr. Vinycomb has in these articles aimed to give his readers a practical dissertation upon the modes of execution, rather than upon the history and classification of styles in the production of book-plates; and in this he has certainly departed from the beaten track, and has furnished a very concise and clear account of the various processes by which our book-plates are produced and reproduced, and the numerous and ingenious methods of manipulation resorted to in their manufacture.

Some people may take exception to the word manufacture, used in this connection, as being inappropriate to a description of what may be defined as one of the modern arts. But the terms, though by no means synonymous, are at any rate akin; for doubtless the majority of book-plates are artistically designed, but for their reproduction and final manipulation the aid of science must be resorted to.

Mr. Vinycomb, in his opening remarks, says: "The production of book-plates, by whatever means, is but a side branch of the art by which pictorial and decorative illustrations of every kind are executed, and copies multiplied by some of the ordinary processes of printing." He then tells us that whereas in former times wood engraving and copper engraving were responsible for most of the book-plates existing, "the advance of modern science has, however, changed all that, and we may now possess a charming book-plate, which is neither engraved on wood or on copper, and yet may pass for either the one or the other, or have characteristics entirely its own." It must be borne in mind, however, that many persons have a great abhorrence of processes of all kinds, and cannot be satisfied with anything short of an Ex Libris worked direct from the copper. In the highest interests of Art, they are doubtless right; but whereas it is only the rich man who can purchase the work of an old master or of a modern painter, by means of the despised process-blocks these same works of art can be placed in the hands of everyone. This, however, is too wide a subject to be dealt with here; yet a glance at the pages of the *Studio* and other current periodicals should convince the most sceptical that the most beautiful work may be produced by these same processes. It is the same with book-plates, the artist's handiwork being reproduced in absolute *fac-simile*.

Mr. Vinycomb leads us, in these pages, by easy stages, through the various developments of engraving, from the rough woodcuts which are to be found in the earliest printed books to the beautifully finished work of Dürer and other masters of engraving. Then comes

the engraving on metals and etching; and last we are let into the secrets of the various means adopted for the duplication of artists' sketches by means of blocks or transfers, from which any number of copies may be taken. He has, as we have already stated, treated his subject in an eminently practical manner, so that the veriest tyro may be able to understand the methods used in the multiplication of Ex Libris; and by means of the well-selected illustrations, and the hints so freely scattered over these pages, it is an easy matter for those who have not studied the art of engraving and process-working to gain a fair knowledge of the subject.

Some of the illustrations have already appeared in connection with these articles in the *Ex Libris Journal* (Vol. III., pp. 151, 170; Vol. IV., pp. 17, 43, 57, 92); others are introduced here for the first time; but they are all well calculated to enhance the value of Mr. Vinycomb's work, and to show what can be done by the various methods in use. Further, it may be safely assumed that all systematic collectors of book-plates will be glad to have in this handy and independent form an essay upon the practical side of a subject in which they have up to the present taken, perhaps, but a general or sentimental interest.

Thanks to the formation of the Ex Libris Society, the collection and preservation of book-plates has now reached something akin to a scientific position, and in large and valuable collections it has become more and more necessary to know how best to classify and arrange our acquisitions. This knowledge can therefore best be secured by studying such works as the present, by means of which the collector is able to

judge of the age and value of a plate, or at any rate to fix an approximate date to those (and they are many) which have no printed date to fix their identity.

This little work comes as a valuable companion to Mr. Hamilton's recently published work on "Dated Book-plates," in which he deals with almost all the branches of the subject of most interest or value to collectors, but has, naturally, little to say upon the practical production of Ex Libris—leaving that to an expert in the person of the writer of the present essay. For practical engravers Mr. Vinycomb has probably said too much, or not enough, or has, perhaps, only told them what they knew already; but as the majority of collectors cannot be classed in this category, it may fairly be assumed that the author has filled a gap in book-plate literature which no previous writer has attempted to supply, and that his work will be found of great value to members of the Ex Libris Society, and to collectors of book-plates in general.

W. H. K. WRIGHT,
Editor *Ex Libris Journal.*

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Transfer, direct from Engraved plate to stone.

Etching on copper by Lambert, Newcastle, reproduced by process block.
From the collection of W. H. K. Wright.

ON THE PROCESSES FOR THE PRODUCTION OF EX LIBRIS.

By John Vinycomb, M.R.I.A.

Introductory.

THE production of book-plates, by whatever means, is but a side branch of the Art by which pictorial and decorative illustrations of every kind are executed, and copies multiplied by some of the ordinary processes of printing. Without, at this stage, going

minutely into the history of pictorial illustration and printing, it may be briefly stated that in times past, the only available modes of reproduction were either by engraved wood blocks with the lines in relief to print with letterpress, or by engraved copper plates having the lines cut into the polished surface of the metal and printed by the copper-plate press (the *modus operandi* in each method will be explained later on).

The processes for the production of Ex Libris—as it is now the fashion to term these dainty little works of art we so delight to collect and preserve—are to-day so numerous and so varied in their style and character of work as to be wholly dissimilar, yet in very many instances we find the results to be so nearly alike that only a practical expert can, with any degree of certainty, state how and by what means they have been executed. It is not therefore surprising that the collector—that picker-up of unconsidered trifles—how-

ever deeply versed he may be in the literature of the subject, for want of some technical knowledge should sometimes be mystified and unable to declare how a particular specimen has been produced. In the older examples there is little or no difficulty in distinguishing the difference between a wood-cut and a print from a copper-plate; to one or the other of these two methods it must of necessity belong. The advance of modern science has, however, changed all that, and we may now possess a charming book-plate, which is neither engraved on wood nor on copper, and yet may pass for either the one or the other, or have characteristics entirely its own.

Some account of these two older methods and their later developments, as well as a sketch of some of the modern processes arising out of the invention of lithography and photography, will be of interest to collectors of Ex Libris; particularly the process blocks so much in vogue at the present time

for high-class book illustrations, magazines, the illustrated weeklies, etc., by means of which the artist's drawing, through a happy union of these later arts and chemical science, may be translated into a printing surface of metal or other material for giving off impressions by the type press, the copper-plate press, by lithography, or by one of the photo-mechanical processes, such as calotype, etc. By reference to representative examples, it is hoped to enable the collector to form a pretty accurate idea of the mode of execution of similar works.

Whatever merit of originality or of fancy the earlier examples may possess, it is interesting to observe how largely book-plates partake of the prevailing style or fashion of the times. By this test alone, collectors are led almost to a certainty to fix an approximate date when they were designed and engraved. Again, how clearly the character of the artist appears upon the face of each example, whe-

ther he was a "base mechanick" at his trade, or a true artist, who lent his thought and skilful hand to embellish the library of his friend or client. The artist himself, in old times, generally a versatile many-sided man, adapted himself to his work and wrought out his ideas *con amore* in whatever direction he might be called upon, whether it was to paint some great picture, to draw and perhaps engrave on wood or copper some of his immortal conceptions, or it may be only a simple book-plate for his friend and patron. Such a man was Albrecht Dürer. A book-plate by him, cut on wood, for his friend, Bilibaldi Pirckheimer, forms the frontispiece to the Hon. Leicester Warren's book on "The Study of Book-plates." Men like Michael Angelo, who could vary his occupation to every phase of Art, now as an architect, conceiving and carrying out the erection of the great Church of St. Peter's at Rome, painting the grandest and most sublime pictures, and in sculpture

without a rival, but who could also bring his lofty mind to the consideration of works of less importance. To him, to Hans Holbein, and others of highest rank as artists, we are indebted for the immense advancement of the fine arts at this period, which, starting with the Renaissance of Literature and Art in the 15th and 16th centuries, gradually dispersed the darkness of the middle ages. Drawing and engraving on wood were brought to a high degree of perfection, and a race of artists was educated, who devoted themselves exclusively to illustrating books which the recently invented art of printing had called into requisition.

Wood engraving, as an adjunct to printed books, was the earliest form in which good art became popularised: book illustration by engraved copper plates was a later development, though the art was not unknown: at a later period, copper-plate illustrations almost entirely superseded wood for the purpose.

One who has carefully studied the illustrations in early-printed books—from printer's mark on title-page to colophon—cannot fail to be struck with the manly and vigorous style of drawing in the cuts, shewing a real grasp of the subject and mastery of detail, and while we may be amused at the quaint conceits, and somewhat crude lines, we cannot but be charmed with the natural simplicity of the drawing, though lacking almost entirely in local colour. In the infancy of the art of engraving on wood, it necessarily followed that there should be some want of refinement in the execution. The engraver on wood was born very young, and had to grope his way by tedious practice to acquire skill and knowledge for his work. The artist, on the contrary, like Minerva, came into being fully equipped, or, to be literal, he already existed; with mature experience he adapted his skill to the requirements of the new art, the first and most important being that, as the tools of the

engraver and the wood he used were unfitted for small details, the lines to be drawn by the artist on the wood must necessarily be *few* and *well chosen*.

The Brandenburg, or Buxheim plate, *circa* 1480. [The oldest Ex Libris actually connected with a printed book. See *Ex Libris Journal*, Vol. II., p. 71.]

FIG. 4.—DEVICE COMMONLY ATTRIBUTED TO CAXTON.

CAXTON'S MARK.

WOOD ENGRAVING.

BEYOND giving some idea of what wood engraving is and how it is produced, it is not intended to do more than refer to the early history of the art—a subject on which bulky volumes have been written—or to enter minutely into the details and modes of execution of modern work. To those who desire further information, special works on the subject may be consulted.*

* Jackson's "History and Practice of Wood Engraving"; Firmin Didot's "Essai sur l'Histoire de la Gravure sur Bois"; "The Book, its Printers, Illustrators, and Binders," by Henri Bouchot; "Wood Engraving: a Manual of Instruction," by W. J. Linton.

WOOD ENGRAVING AND COPPER-PLATE ENGRAVING—THE DIFFERENCE.

Copper-plate engraving, which almost entirely superseded wood in the seventeenth and eighteenth centuries, differs in principle from wood engraving in this—that a woodcut has the lines of the design standing up in relief, the wood between the lines incised or cut away, so that when the surface is inked the lines so charged will give off an impression upon paper by rubbing the back, or by the use of the type press. In the copper plate the lines are cut *into* the polished surface of the metal, which, when smeared over with printing ink, and the surface wiped clean, leaves the incised lines filled with ink; an impression is taken by the use of a press specially adapted to the purpose.

It will be seen that *surface printing* is the necessity and characteristic of wood engraving. Simple and crude in its beginnings, owing chiefly to the imperfect mechanical means of

cutting the wood in sufficiently fine or exact lines; it was employed first in the production of playing cards, the outlines of which were formed by impressions from wood blocks, and the colouring filled in by hand or stencil. In Europe the earliest application of the art to pictorial illustration took place in Germany about the close of the fourteenth or beginning of the fifteenth century. The oldest woodcut with a date known is of 1423. It represents St. Christopher carrying our Saviour on his shoulders across a river. Other specimens, though undated, from their greater rudeness, have been held to have superior claims to antiquity. With the invention of printing the art soon made rapid strides, and on the introduction of moveable types to print in conjunction with engraved blocks, a new impetus was given to the production of engraved wood blocks. In the early part of the sixteenth century, several artists of celebrity were either designers on wood or engravers.

Books at this period were profusely illustrated. Among the most distinguished in this line was Albert Dürer, whose productions as a painter and an engraver on copper and wood are so numerous that he could not possibly have engraved a tithe of the wood engravings attributed to him; probably he only put the design on the blocks, leaving them to others to execute.

The art was chiefly practised in Germany, where it was patronised by the Emperor Maximilian, for whom Burgmair produced the great work, "The Triumphs of Maximilian." The next great name in the annals of wood engraving is that of Hans Holbein, whose "Dance of Death" was printed in Lyons in 1538.

In England Caxton brought out his "Game and Playe of Chesse" in 1476, with cuts. There are woodcuts also in the "Golden Legend," 1483; "Fables of Æsop," 1484; Chaucer's "Canterbury Tales," and other

books of his printing—all scarce and poor in execution, but noticeable in the history of Art. From 1545 to 1580 wood engraving continued to be much used for illustrating books in England, chiefly by John Daye. From this period there is little to be recorded of essential importance till the appearance of Bewick, to whom the revival of wood engraving is chiefly to be attributed.

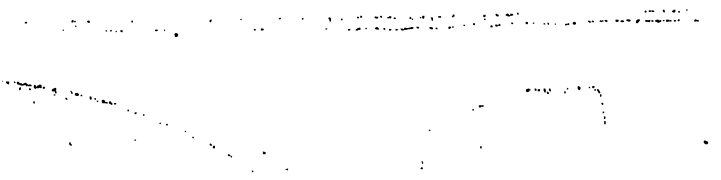
FORM-SCHNEIDER.

EARLY METHOD OF ENGRAVING ON THE SIDE OF THE WOOD WITH KNIVES.

In early days of wood engraving a close-grained slab of wood of a suitable thickness to print with type was used for the purpose by the engraver—cut the long way of the tree, and not upon the end or section of the wood as in modern work; and the cutting was necessarily executed with the knife. The quaint and rude cut on the accompanying double page is a fair example of the earliest species of woodcut, and is the most ancient Ex Libris known.

Regarding the knife as a cutting instrument, Mr. W. J. Linton, in his "Manual of Wood Engraving," p. 28, says: "As far as I have been able to ascertain, with the one possible exception of the cuts to Croxall's Fables, 1722, all engravings on wood from the earliest time to the time of Bewick were done with the knife instead of gravers."

We can to some extent realise the diffi-



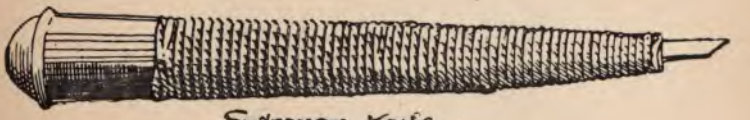
Rude

The most ancient Ex Libris known. It is of Jean Knabensberg, c
its mouth. In the banderole we read, " Hanns Igler das dich ein
has a copy of this rare plate in his possession, which he valu

ɔdcut. (Actual size.)

r, chaplain to the family of Schönstett. It represents a hedgehog with a flower in ." Its approximate date is 1450. Herr Ludwig Rosenthal, antiquariat, Munich, ıarl ts. See Warnecke's "Die deutschen Bücherzeichen" (Ex Libris), 1890.

culties the early wood engravers laboured under in this respect in producing fine work, but when we examine the later works of the German engravers, and observe the gradual improvement from crudeness to really excellent work, we are amazed that with such disabilities such splendid results were at-



From Papillon's Treatise, 1766.

tainable by the knife. The *Form-schneider*, as the engraver of block pictures was termed, increased in skill and dexterity in deftly cuting the design exactly as it was drawn on the wood, and with exceeding truthfulness; using a finer grained and harder wood and tools more perfectly adapted for the work, so would the art advance by leaps and bounds, until in the time of Dürer and Holbein it had reached

its high-water mark of excellence. Boxwood was then, as now, in use, but for delicate work only, and cut plank-wise. For larger

PRESS OF ASCENSIUS.

work softer woods were good enough: pear and apple woods, privet, sycamore, and any white wood upon which a drawing could be seen—everything being drawn line for line on

the plank; the engraver's business simply to cut away the white spaces between the lines, cutting, as before said, with knives in the

Small DURER Woodcut, of the Nuremberg family of Kress of Kressenstein.

smaller spaces, and with chisels and gouges clearing away the larger to a sufficient depth to escape the ink in printing.

At the present day, in the skilfully drawn

and engraved block books of the Japanese, the illustrations will be found to be drawn with the brush upon *the side* of the wood, and cut with a knife; but we are not now astonished at anything done by this wonderful people, who have knocked the wind out of us in so many forms of art.

MODERN WOOD ENGRAVING.

To understand the scope and practice of wood engraving, it will be necessary to glance through the illustrated publications of a few years ago, before process blocks had to so large extent superseded the work of the graver. The immense popularity the art has obtained in this country owing to the establishment of the *Illustrated London News*, *Graphic*, *Art Journal*, *Magazine of Art*, and similar publications, not to speak of book illustrations, has been remarkable. The excellence of the work and the infinite variety of style introduced by the best artists and

Ex Libris engraved on wood by Bewick, reproduced by process block.

engravers show it to be capable of representing every artistic quality supposed to be

peculiar to copper and steel engraving; other qualities it has, such as power and force in the darker portions, and the use of white line work on tint, or solid ground—effects obtained with extreme difficulty upon the metal plate.

Wood engraving for pictorial work may be divided into two kinds :—

I.—Black-Line or Facsimile Work.—The drawing on wood is engraved exactly as it is drawn, line for line. All examples up to the time of Bewick, and a great many since, are of this kind. As illustrating the best qualities of this style of wood engraving, no more apt examples could be named than the cartoons and drawings in *Punch* by Tenniel, Doyle, Leech, and others, before the introduction of photo-etched process blocks. (Bewick himself, an artist as well as an engraver, made a departure from the old crude manner of wood engraving by introducing a new style of work, imitating more truly the local colour and the textures of nature: drawing the subject of the

design on wood in pencil and afterwards *tinting* in the masses of shade and local colour with washes of china ink; and *with the graver* giving all the characteristic markings and

(From the Collection of W. H. K. Wright, Esq.).
Wood Engraving by Bewick.

minuter details by white lines upon the dark ground. In his Natural History Cuts he imitated in the most marvellous manner the textures of trees, grass, and natural scenery, the plumage of birds, the shaggy or smooth

coats of animals, etc. A number of Ex Libris executed by him on wood have the same characteristic handling). The two wood engravings by Bewick are reproduced by process blocks. Though inferior to many of his Natural History Cuts, they fairly show the style and character of his handiwork—the careful execution of details and the use of white-line work upon solid black ground.

II.—TINTED WORK.—In this mode the subject is drawn in TINTS OR WASHES, and partly with the pencil. To be successful in work of this kind, to interpret the artist's ideas truly, the engraver must himself be an artist of considerable ability, as he has to adapt the lines to the work, and in this lies rare judgment and discretion, as not only the direction of the line most conducive to develop the form, but the width and thickness of the lines and spaces must be accurately judged; the various qualities of surfaces must likewise be suggested by the engraved lines.

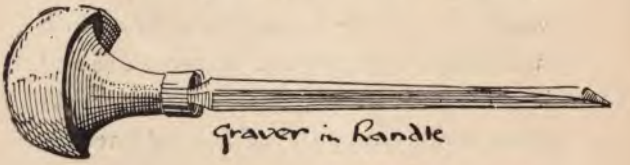
MATERIALS AND MODE OF PROCEEDING.

The wood used by engravers is boxwood, on account of its close grain and firm texture; it is principally imported from Turkey, cut transversely or across the grain (so that the engraving is done upon the end way of the wood). It is made seven-eighths of an inch in thickness (type height). It takes a beautifully smooth surface, and cuts under the graver with the utmost clearness and fineness. The polished surface of the wood being unsuitable for drawing on, a slight "tooth" is given to it by a little water-colour white rubbed over the face of the block with the ball of the thumb until nearly dry, when it presents a pleasant surface for the pencil.

The drawing or design having been sketched out and perfected on paper, it is then traced the reverse way upon the wood block, and the drawing then worked out, either in black-line facsimile or in tints, as may be intended. The *black lead pencil*, of sufficient hardness

of lead to stand the pressure upon the solid surface, is the favourite instrument for drawing. For tinting, either the pencil or the brush with washes of china ink can be used.

The tools used are *gravers*, *tint-tools*, and *scoopers*, or cutting out tools—in all about a



dozen different sizes; the several kinds are here indicated. With the gravers the outline and all the details are cut; the tints, by which the proper tones or light and shade are obtained, can best be rendered with tint tools of various widths of cut. The parts not required to be printed are hollowed out

with scoopers. It will be understood that all the blanks or white parts of an engraving have been cut away in the block.

Mode of Engraving on Wood.

There are several *et ceteras* also required by the engraver, as, an oil-stone to sharpen his gravers; an eye-glass, when engraving very fine work; a small circular sand-bag, on

which the block is held while being engraved; an instrument called a burnisher, with which to take proofs. A glass globe filled with water, to concentrate the light from lamp or gas jet upon the block, is used at night.

The engraving being completed, the surface of the block is inked very lightly with printing ink, and a piece of India paper, or any fine paper of similar quality, being laid upon it, an impression is taken by rubbing the paper with the burnisher until it is fully printed. From this proof the engraver can judge whether any alterations are required and what improvements can be effected.

The revival of wood engraving by Bewick and others, and the high state of perfection to which it had been brought by his immediate successors, to a very great extent superseded copper-plate engraving for book illustrations, though for Ex Libris, copper-plate held, and still holds its place as the chief and deservedly favourite style.

Crest Ex Libris of R. Day, F.S.A., *Cork.*

Engraved by C. W. Sherborn, and printed direct
from the Copper Plate.

ENGRAVING ON COPPER AND STEEL.

WHERE be the equal now of those glorious editions of the poets, the "Annuals," "Keepsakes," "Books of Beauty," and other delightful volumes that still charm the eyes and glad the hearts of those who have the taste and the wit to possess them? As works of the highest art quality, they have never since been equalled for beauty of work, with their engraved titles, frontispieces, and illustrations in the text, drawn by Stothard, Turner, Creswick, Stanfield, Harding, and a host of the first names in British Art, and engraved in the rarest and most exquisite manner by men equally eminent in their line. "Woodcuts," however, cut them out for the

KRESS BOOK-PLATE.

(See *Ex Libris Journal*, Vol. IV., p. 9.

Engraved on Copper by Hans Troschel, 1699.
Reproduced by process block.

time, owing to the excellence to which the art had attained, and the greater rapidity and cheapness in printing.

In all the changes and inventions in the modes of art reproduction the engraved plate has steadily held its own as the most finished and perfect. For Ex Libris it is particularly suitable; it is *par excellence* THE STYLE for the attainment of the highest art quality.

The Art Journal, supported by one or two similar publications, has heroically endeavoured to maintain the traditions of the best period of the Art in its steel plate illustrations, but, except for pictures of this kind, and of larger size for framing, illustrations on steel and copper for books may be said to be practically extinct.

Time, however, has its revenges: wood engraving, in its turn, is being rapidly displaced by "*process blocks*" (of which more anon), and now, if we take up any recent illustrated book or journal, we find the bulk of the

pictures and designs not wood engravings but process blocks.

In every good collection of Ex Libris the majority of examples will be found to be printed from engraved plates, very few relatively being from wood blocks. The reason is not far to seek. The wood engraving as practised in England previous to the opening of the present century was poor in execution, and did not lend itself sufficiently to working out minute details with the same ease and readiness with which they can be executed on copper.

That it was the favourite mode of producing these dainty little works is evident also from the fact that copper-plate pictures for book illustrations of every kind had almost entirely superseded wood engraving, which had indeed fallen completely into disfavour. Until the beginning of the present century, when Bewick and others had elevated it into a fine art, wood engraving was in an exceedingly rude

Pure Line Engraving by Robert White, from a Painting by Sir Godfrey Kneller.
Reproduced by process block.

condition, and little fitted for small works. Copper-plate engraving, on the contrary, had for several centuries flourished successfully; every goldsmith was able to "*chase*" and engrave the decorative and heraldic work upon silver plate and goldsmiths' work, or upon metal of any kind, in relief, or intaglio, as in medals, coins, etc. That this is no mere assumption we know from historical evidence, as well as from a careful comparison of the "*handling*," or the manner of cutting the lines upon silver work, which is identical with the style of cutting the lines in so very many engraved book-plates of the last and early part of the present century. Whatever may be thought of the vagaries of the accessories in the Jacobean, Chippendale, and other kindred styles—which are essentially silver engraving patterns—much of this class of work shows at least a true heraldic spirit in the treatment of the charges.

Benvenuto Cellini, whose works now bring

A Chippendale pattern. Silver Engraver's style of work, reproduced by process block.

fabulous prices in goldsmith work, was an expert engraver as well, as were probably most of the workers in the precious metals of his time. Hogarth, in the earlier part of his career, did much in the way of engraving arms, crests, etc., for the silversmiths; so did Bewick, who worked on wood and on metal indifferently. The writer has done a fair share of similar work in his younger days; and to his knowledge it was the custom in many establishments for the engravers to do both, as the exigencies of business required, though the tendency when work was plentiful was to specialise, each man doing that part for which he seemed to have an aptitude. This refers particularly to graver work; the pictorial engraver executing his work principally by means of the etching process, and only finishing up with the graver.

No doubt a life-long practice in one particular class of work of this kind is calculated to engender a stiff and formal manner,

and set patterns to become stereotyped, were it not for the capricious changes of fashion; sometimes slowly developed, at other times, a new fashion suddenly sets in and changes all; the later chasing the earlier out of the field, only to be elbowed aside in its turn. Styles of ornament, as they course each other down the stream of time, invariably leave their high-water marks on the margin, which serve as valuable data for the student; the prevailing styles of decorative and heraldic art, having, like all mundane things, their periods of development, full-blossoming, and decadence, the dates of which, book-plate collectors, aided by dated specimens, arrive at with tolerable certainty.

The prevalence of a particular style, its vogue and duration, will account in a great measure for the family likeness observable in so many book-plates; the chief factors, however, may be set down to the general low state of the art, the paucity of designers and

Pure Line Engraving, reproduced by process block.

engravers of merit, and the ample supply of the ordinary article—the mechanical craftsman.

As to the history and development of styles in Ex Libris, a reference to the works of the Hon. J. Leicester Warren, J. Paul Rylands, F.S.A., Egerton Castle, M.A., F.S.A., W. J. Hardy, and the pages of the *Ex Libris Journal*, will find the subject fully and plainly set forth.

A word as to the origin and history of Copper-Plate Engraving. The art of engraving on metal plates, for taking impressions on paper, was first practised by Tommaso Fineguerra, a Florentine goldsmith, about the year 1460. Some writers have claimed the invention for Germany, but it is generally considered that the art was first practised in Italy, and had its origin in the workshops of the goldsmith. An assistant is said to have suggested to Fineguerra the possibility of taking an impression from an engraved design

with ink on moistened paper. *The first book printed at Rome* was illustrated by *the first plate engraving*. This work is dated 1478, but was commenced in 1472. Engraving made rapid strides towards excellence in Germany. Albert Dürer was a man whose universality of talent extended the boundaries of every department of art, and carried all to a degree of perfection previously unknown. He had great command of the graver, and carried his plates to a higher state of finish than his Italian contemporaries. He is also believed to have invented the art of etching by corrosion: on examining his etchings, we see that they have all been corroded at one "*biting-in*," which sufficiently explains their monotonous appearance, and proves that "*stopping-out*" was not then understood. To the Dutch and Flemish schools we owe many improvements in the art. The celebrity of the French school dates from the time of Louis XIV. Gerard Audran was the first

Pure Line Engraving, reproduced by process block.

engraver who successfully united to any extent the use of the graver and the etching point. The English school of engraving

Line Engraving by William Hogarth, reproduced by process block.

dates only from the middle of the eighteenth century, previous to which those who practised the art in England were chiefly foreigners. Hogarth engraved many of his own

William Hogarth's own book-plate. Line Engraving, reproduced by process block.

designs. Francis Vivares introduced the art of landscape etching: he, Woollet, and Brown produced some of the first landscape engravings extant. Sir Robert Strange excelled in portrait engraving. Of the moderns who have attained eminence in the various branches of the art, the very enumeration of them would lead to needless length, the present purpose being chiefly to describe the processes.

THE VARIOUS MODES OF ENGRAVING ON COPPER AND STEEL PLATE.

There are many kinds of engraving on steel and copper for the purpose of printing by the copper plate press. We will specify those principally in use and indicate their chief characteristics; afterwards, some further explanation may be necessary. It may be here stated that the various processes are of such a technical nature that it would be impossible in a short compass to explain all the details of

Richard Southcote Mansergh.

Tipperary.

Transfer, direct from Engraved plate to stone.

execution; we may, however, refer those who desire to pursue the subject further to an excellent little handbook (price one shilling) published by Winsor and Newton,* which, as stated in the preface, will, by means of any of the modes of engraving on copper therein treated of, enable anyone "skilled in pen and ink drawing to reproduce their designs with greater delicacy and added depth of effect." Other books on the subject there are, of greater cost, as Hamerton's splendid work, but for the amateur the handy little manual just named is an admirable guide.

To one skilled in drawing, and with some leisure and enthusiasm for the work, ETCHING offers a delightful field for the exercise of the artistic mind. There are no technical diffi-

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* "The Art of Etching explained and illustrated, with remarks on the allied processes of Dry-point, Mezzotint, and Aquatint." By H. R. Robertson, Fellow of the Society of Painter-Etchers; Author of "Life on the Upper Thames," etc. Winsor and Newton, Limited, 38 Rathbone Place, London.

Edward Loveden Loveden, Esq:
Buscot Park, Berks.

Pure Line Engraving, reproduced by process block.

Transfer, direct from Engraved plate to stone.

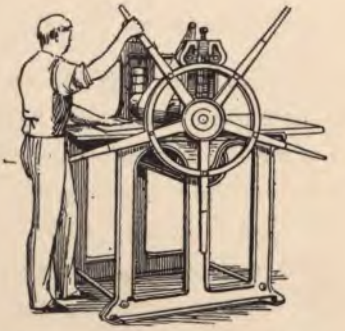
culties that may not be surmounted by care and patience. The few tools and necessary appliances are not of a costly nature, if we except the copper-plate printing press.

There are different kinds or methods of engraving, the six principal varieties of which need only be considered, namely :—

(1) Line Engraving.
(2) Etching.
(3) Soft-ground Etching.
(4) Aquatint Engraving.
(5) Mezzotint Engraving.
(6) Stipple Engraving.

The distinctive features of all copper-plate and steel-plate engraving consist in this, that the lines or strokes composing the design are cut or ploughed into the surface of the metal with a fine tool termed a graver, etched or corroded out with acid or by other means. A *Print* is obtained by filling the lines so made with a special ink composed of a drying

oil and colour-pigment. During the process of inking the plate is kept warm, the superfluous ink being wiped off with a coarse muslin rag, and made perfectly clean. The plate, placed in the travelling bed of the copper-plate press, is covered with a sheet of paper slightly damp; on turning the press, it is subjected to such pressure as forces the paper into the lines; by this means the ink is transferred to the paper, and the result is an impression or *proof*.



COPPER-PLATE PRINTING PRESS.

18 92 D. Wright

Transfer, direct from Engraved plate to stone.

I.—LINE ENGRAVING.

The majority of the earlier book-plates are engraved, or cut into the plate entirely with the graver, and may properly be termed *line engraving par excellence.*

As early examples of this style of work we are enabled to give reproductions of several book-plates, viz., Kress of Kressenstein, by Hans Troschel, 1699, p. 28; the portrait plate of Samuel Pepys, by Robert White, p. 31; two plates engraved by Hogarth, pp. 40-41. The Ex Libris of WILLIAM COWPER, Clerk of the Parliaments; EDWARD LOVEDEN LOVEDEN; —— BARROW; and HENY JAMS PYE, also illustrate the quality of *line* or *graver work* alone. The examples interspersed in the text carry their own explanation.

As modern examples of this style we are enabled to give several characteristic varieties —the library interior of W. H. K. Wright, by J. E. Wood, of Plymouth, and a number designed by the writer and engraved by Marcus

Ward & Co., Limited, printed by lithography —all of which will be found useful as keys to the style of handling of graver work alone, and in combination with etching.

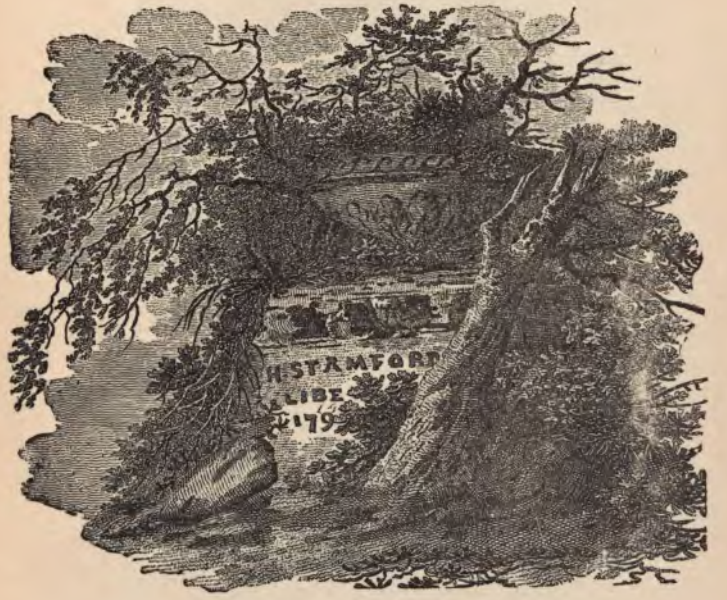
Among the chief exponents of the art may be mentioned the name of C. W. Sherborn, who is *facile princeps* as an engraver of heraldic subjects. One of his smaller works, engraved in pure line, appears facing page 27, the dainty crest plate of R. Day, F.S.A., *printed direct from the copper plate;* a favourite old toast, in playful allusion to the wings in the crest, doing duty as a motto.

2.—ETCHING.

This method admits greater freedom of handling than graver work. The design is drawn through a resisting ground with the etching point, and the exposed lines on the surface of the copper corroded to the requisite depth with aquafortis, the finishing of the work being usually done with the graver.

N°

Transfer, direct from Engraved plate to stone.



Etching on Copper reproduced by process block.
From the collection of W. H. K. Wright.

Machine ruling or *tinting* is now much used in conjunction with line engraving and etching, for the even tints of skies and level surfaces in pictorial work, and for the symbolical lines denoting tinctures in heraldry, of which several examples are given.

Steel plates were used for engraving very fine work, or when large numbers of copies were required to be printed from the plate. Any advantage over copper which steel formerly possessed is now neutralised by the process known as *steel facing*, that is, coating the copper plate with an electro deposit of iron.

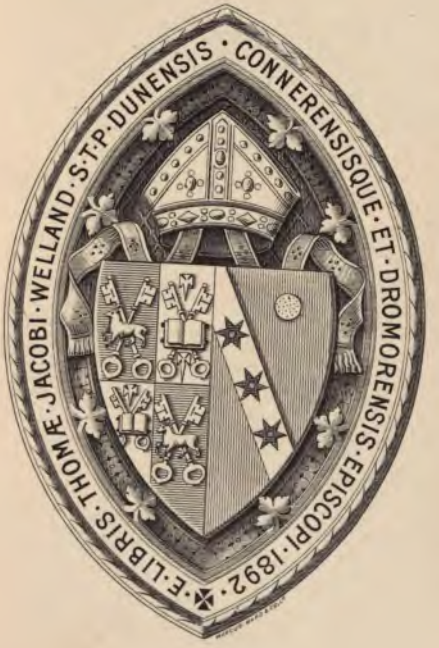
Copper-plate printing, as it is termed, though giving the most perfect result, is slow and tedious, and necessarily costly. A much speedier method of printing—by Lithography—is now much used instead, transfers from the engraved plate being put on the lithographic stone and printed therefrom, the original plate being retained intact. (See examples under Lithography.)

Two Etchings on Copper by Bewick, reproduced by process block.
From the collection of W. H. K. Wright.

Some early examples of etched plates are given. The urn design of Charles Bragge, Armorial Landscape, and Bewickian Landscape show the character and handling of etched work as distinguished from line engraving. Other examples illustrate the combination of *Line*, *Etching*, and *Machine Ruling work*.

3.—SOFT-GROUND ETCHING.

A very charming style of work which was much used by Bartolozzi and other engravers of his time, but now gone entirely out of use. A suitable book-plate engraved in this manner not turning up in time, the present fine example of the style was selected to illustrate the character of the work, which bears a close resemblance to a chalk drawing, and on that account offers considerable difficulties in the way of reproduction by the half-tone process. The result is, however, successful in a remarkable degree in translating the peculiar texture of the original.



Transfer, direct from Engraved plate to stone.

Joseph Pollard.

NEWCASTLE

Two Etchings by Bewick, reproduced by process block.
From the Collection of W. H. K. Wright.

The allegorical device represents the turret-crowned goddess Cybele, "mother of a hundred gods," standing upon an isolated rock in the sea, holding out an olive-branch, and with her attribute, the rudder, as guide and director of the destinies of cities and states; youthful figures representing the Arts and Sciences—which are the glory of a State—are disporting themselves in the clouds.

Though not originally intended for a book-plate, a friend is desirous of adopting it, with the motto from Virgil, "*Fato prudentia major*" —to intimate that, in his opinion, prudence is greater than fate.

4.—AQUATINT ENGRAVING.

A style of work having all the appearance of a china ink drawing, and frequently used by artists in conjunction with etching, to give body and consistency to the tints. An admirable example of this combination of etching and aquatint is the charming book-plate of the

Transfer, direct from Engraved plate to stone.

Hon. Leicester Warren, by W. Bell Scott, well known to collectors. It does not, however, lend itself well to reproduction.

The texture, which may be of various degrees of fineness, is produced on the plate by a solution of resin (dissolved in pure spirit), which is poured over the surface; as the spirit evaporates it leaves the resin in minute isolated particles adhering to the plate. The design is traced or transferred upon it, the highest lights "*stopped out*" with engravers' varnish. The etching (or biting-in with acid) is then proceeded with; repeated stoppings out and etchings are made as the deeper shades are attained.

5.—MEZZOTINT ENGRAVING.

Produced by roughening the surface of the plate by a rocking tool, and the lights and shades attained by scraping and burnishing. Seldom used for small work, but largely used combined with Nos. 1 and 2 for prints and

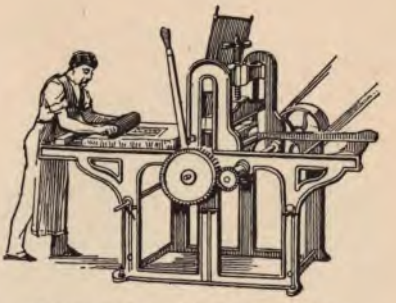
pictures. The small French print of the Virgin and Child, reproduced by half-tone process block, represents fairly well the character of the work. (See example under "Half-tone Process Blocks.")

6.—STIPPLE ENGRAVING.

Performed with the graver or other tool, which is so managed as to produce the tints by small dots. This method is much used for statuary and for portraits particularly, the rest of the picture being generally executed by some of the other methods, Nos. 1 and 2 especially.

Transfer, direct from Engraved plate to stone.

Etching on Copper, reproduced by process block.

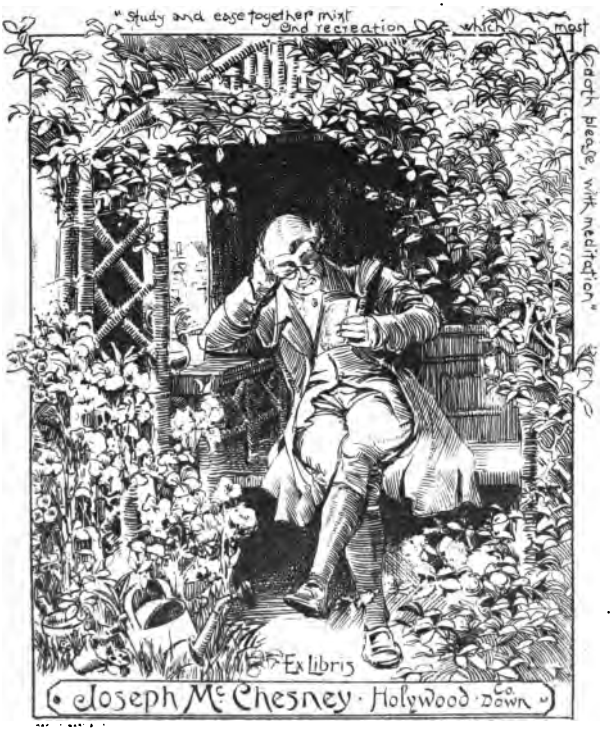


LITHOGRAPHIC PRINTING PRESS.

LITHOGRAPHY.

LITHOGRAPHY, as one of the modern arts, dates only from about the end of the last century. The inventor, ALOYS SENEFELDER, the son of an actor, was born at Munich in 1771, and died there on the 26th February, 1834. Intended for the profession of the Law, he, on the death of his father, was obliged to retire from the University.

Thrown on his own resources at the age of eighteen, he turned to his father's profession, but met with little success. Writing



Drawn on transfer paper and transferred to stone direct,

for the stage, he found difficulty, owing to his poverty, in getting his writings published, and it was in trying to find out some ready process to attain this end that he arrived at what we now term the Art of Lithography. Senefelder lived to perfect his art to a high degree, and to see it brought into general use, but without bringing much profit to himself. Since his time many advances have taken place, and new developments in various directions, as in the beautiful art of chromo-lithography and photo-lithography.

The term Lithography is derived from the Greek, *lithos*, a stone, and *grapho*, to write. Lithographic stone is a species of limestone, the best qualities of which are obtained from the quarries at Solenhofen, near Munich, and from Papenheim, on the Danube. The stones are cut into slabs or blocks of various sizes to suit the work required; to print an octavo page, quarto, etc., up to sixty inches by forty, and even larger. The thickness varies from

an inch and a half in the smaller, to four or five inches in the larger sizes. The stones are ground perfectly level with sand and water, and finished off with a fine stone until a perfectly smooth polished surface is produced, when it is ready to receive the drawing, or to have transferred to its surface a drawing or writing made upon specially prepared paper *(lithographic transfer paper)*. For chalk or crayon drawings, the smooth surface of the stone is *grained* with sifted silver sand, which gives a beautifully even granular texture, and the drawing is made upon it with *lithographic chalk*. For drawing upon the smooth stone, or upon transfer paper, *lithographic ink* is used.

THE PRINCIPLE UNDERLYING THE PROCESS OF LITHOGRAPHY is simply this:—The nature of the stone is such that it retains with great tenacity the resinous and oily substances contained in the ink or the crayon employed to form the design. The lithographic stone

Drawn on transfer paper and transferred to stone direct.

also absorbs water freely; this, combined with the peculiar affinity between resinous substances and their mutual power of repelling water, causes the ink on the printing roller to adhere to the design and to leave untouched the damp surface of the stone.

THE PROCESS OF LITHOGRAPHIC PRINTING is as follows:—After the drawing on the litho. stone is completed, it receives a wash of dilute acid and gum arabic, and this, by removing the alkali from the ink, leaves the design on it in a permanent form, at the same time that it etches away a minute portion of the surface of the stone, and renders it more absorbent of water. After *etching*, all trace of the acid is removed with a sponge and water, the stone is rubbed over with a *damp muslin cloth* to equalise the moisture upon the surface, the *lithographic roller* charged with *printing ink* is passed over the surface, the lines of the design alone taking ink; the paper is then laid upon the stone, and a copy

is obtained by means of the *lithographic press.* The damping of the stone and inking is repeated for every impression.

LITHOGRAPHIC WRITING AND DRAWING INK and LITHOGRAPHIC CRAYONS for chalk drawing on stone, are similar in composition, but different in proportions, suited to the particular kind of work, *white wax*, *shell-lac*, *hard soap*, *tallow*, and *lamp black* being the chief ingredients. For writing and drawing all kinds of line-work on stone or transfer paper, the ink is made in sticks, and rubbed down with water to a proper consistency for use, and used with a *pen* or *sable pencil.* For chalk drawings upon a grained stone, the ink is cast into the form of crayons, and used in a port-crayon for convenience in drawing, sharpening the point as required.

CHALK DRAWING ON STONE is rarely used for such small work as book-plates. We need not therefore more particularly refer to it, than to say that excellence in this department

Drawn on transfer paper and transferred to stone direct.

of Lithography may be attained more readily than in *fine-line work*, for which constant practice, and a very delicate handling of the implements, the lithographic pen and fine sable pencil, is required.

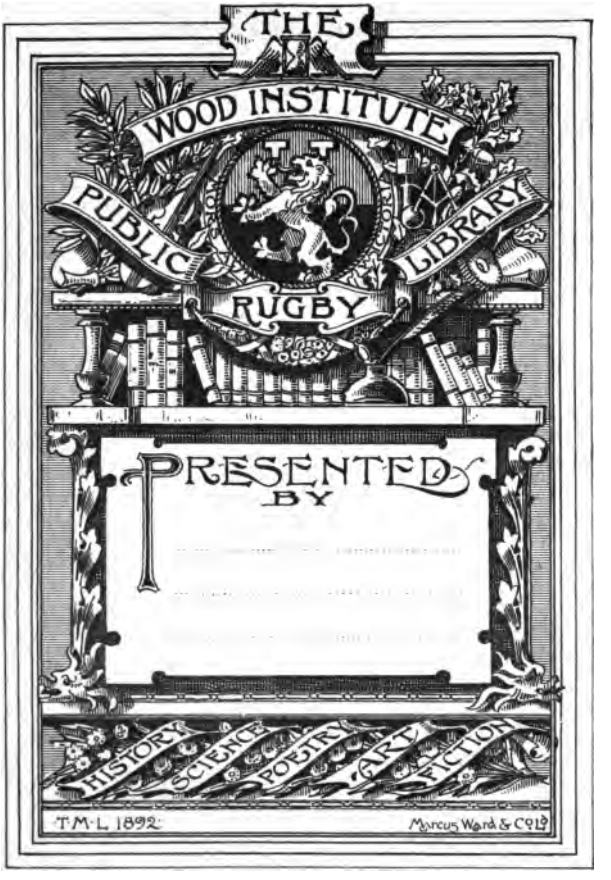
The technical difficulties to be overcome in Lithography are very great; to the unpractised they seem insuperable: the magic of handling acquired by long-continued practice in the use of the materials, as seen in good examples, exhibits a degree of technical skill which the amateur may not hope to rival. To draw with the *pen* or *small sable pencil* with the requisite degree of fineness of line of the expert, and with the precision and apparent freedom of the accomplished artist, is a thing of difficult attainment. This is a disadvantage to artists generally, who are obliged to entrust the translation of their drawings to the professional lithographer—not always with a satisfactory result (!)

Grained or Textured Paper, of which

there are many varieties specially made with a chalky surface for *photo-lithography*, are now much used, on which the artist makes his drawing in litho-chalk or suitable black-lead pencil. As the knife point may be used to scrape out lights on the chalky surface, it admits of very effective work for pictorial illustrations. A photo-litho transfer is then put to stone, or a *process block* made from it, as may be required. Drawings made on this prepared textured paper with lithographic chalk may also be transferred to stone direct, and printed from. Extreme beauty and fineness are, however, gained by the photo-reduction.

Very beautiful Pictorial and Heraldic Ex Libris have been executed by the lithographic process, hardly to be distinguished from plate engraving.

ENGRAVED PLATES may have transfers taken from them and printed from stone. A number of examples, with explanatory titles, are given of the various modes of ***lithographic and photo-lithographic reproduction.***



Drawn on transfer paper and transferred to stone direct,

CHROMO-LITHOGRAPHY.

Some very dainty examples of Ex Libris emblazoned in heraldic tinctures are met with, very charming in their way, principally German ones. Colour in the heraldry of book-plates has not found the same favour in this country as on the Continent; for what reason it is hard to understand. Through the courtesy of Mr. R. S. Mansergh, Friarsfield, co. Tipperary, we are enabled to print as a frontispiece the plate newly designed by the writer, and executed by Messrs. Marcus Ward & Co., of Belfast.

PHOTO-LITHOGRAPHY.

Photo-lithography is now so largely employed for the reproduction of all classes of work that a few words in explanation of it may be very desirable. The process is of a somewhat technical nature, but simplicity itself when understood! It is founded upon the fact that *gelatine*, by the addition of a certain chemical, is rendered insoluble on exposure to light.

A negative photograph from the original

drawing in black lines having been taken by the *wet* or collodion plate, it is intensified to the required degree, so that the lines of the design appear perfectly clear upon a dense, opaque, black film. It is then "exposed" in the printing frame, upon paper that has been coated (in the dark) with the prepared gelatine —now extremely sensitive to light. Taken out of the printing frame in the dark room, the exposed print (which barely shows any trace of the design at this stage) is then covered with a thin film or coating of printers' transfer ink. *The lines exposed to the light have been rendered insoluble*, while the white ground of the design protected by the negative is still in a soluble condition. Floated in a bath of warm water, the soluble gelatine (not acted on by the light), with its coating of ink, is washed away—the insoluble lines of the design alone remaining, coated with printers' transfer ink. This "*photo transfer*" is then ready to be put down to the lithographic stone and printed from, or it may be transferred to

·SIC·ITUR·AD·ASTRA·

ex libris.

ROBERT DAY, JR. F.S.A., M.R.I.A.

CORK.

Drawn on stone direct, with mechanical ruling added.

a polished zinc plate, and etched to the requisite depth as a block for type printing.

DRAWING FOR PHOTO-LITHO, AND FOR PROCESS LINE-BLOCKS.

The invention of photo-lithography enables the artist to make his own drawings or designs in black and white on a larger scale (usually one-third or one-half larger than required), which will be photo-litho'd down to the size required, thus preserving intact every touch and flexture of line in the original, and, by the reduction, gaining a fineness of line and beauty of finish which the artist could not himself produce on the reduced size. MACHINE RULING may afterwards be transferred into the design when it is upon the stone, as in some of the designs in the accompanying examples.

"*Process blocks*," which reproduce so admirably all kinds of drawings and engravings, are, when carefully printed, sometimes very difficult to detect from direct lithographs.

Ulster King of Arms.

Pen and Ink Drawing by Rev. Wm. FitzGerald, reproduced by process block. Much reduced.

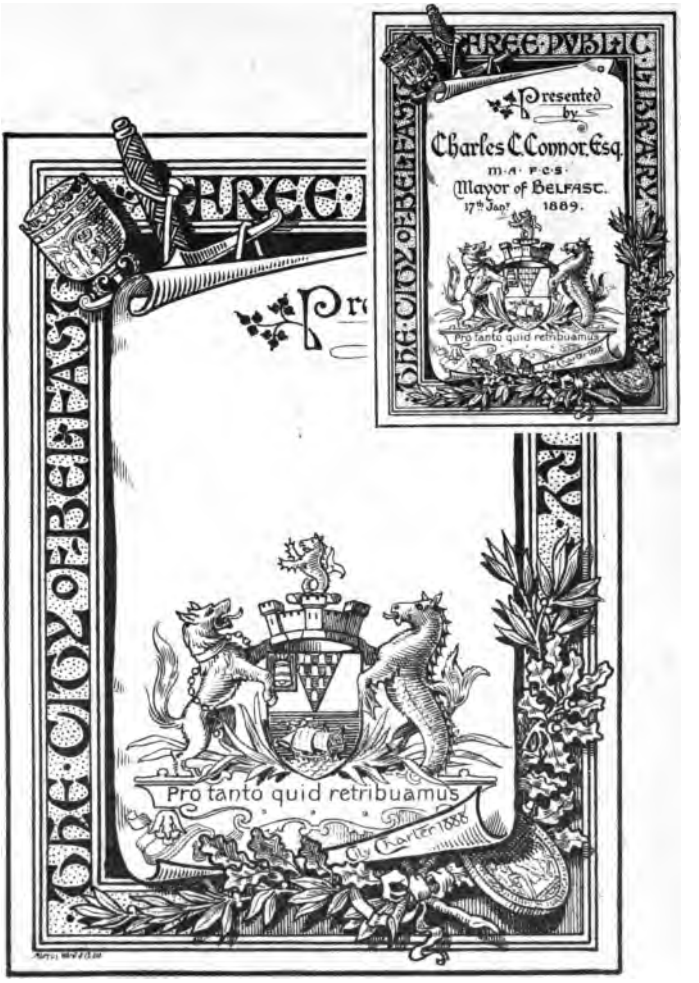
PROCESS BLOCKS.

LINE WORK.

THERE are quite a number of processes that have been brought into use with more or less success, as Graphotype, Dallastype, etc., to which it is not necessary to refer, as for all practical purposes Zinc Etching holds the field against all others, either for HALF-TONE BLOCKS, or for LINE BLOCKS of every kind, of which last a number of examples are here given, with an explanatory title to each specimen.

For work of the very finest kind, the Photogravure or Heliogravure, printed by the copperplate press, bears the palm, but it has the disadvantage of being very expensive. Those desirous of knowing more fully concerning the various processes in use may be referred

Pen and Ink Drawing, reproduced by process block.
Slightly reduced.

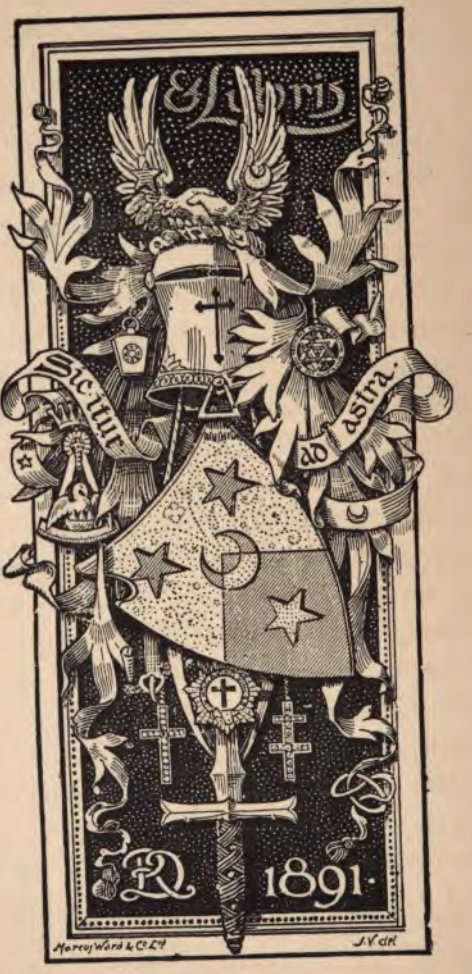


Pen and Ink Drawing reproduced by Photo-lithography.

to a very excellent volume in the "Book Lovers' Library"—"MODERN METHODS OF ILLUSTRATING BOOKS," by H. Trueman Wood, M.A., Secretary to the Society of Arts, and published by Elliot Stock.

These modern methods provide a most important and valuable means of producing illustrations for printing purposes. By their aid, any photograph, drawing, design, or engraving of any kind can be translated into a block, and with such success that, with suitable subjects, it is often hardly possible to tell the original from the copy; and not only do they enable surface blocks to be produced with great rapidity and at slight cost, but they give blocks capable of producing effects which could not be obtained at all by wood engravings, or, if at all, only at great expense.

Many artists have hailed with delight the process of Zinc Etching, as by its means they obtain a perfect *fac-simile* of their work, more especially pen-and-ink drawing, which



Pen and Ink Drawing, reproduced by process block.
Slightly reduced.

HYS BOKE ·
Tis mine and it is likewise yours ·
but an if this will not do, let it be mine goode friend,
for I am the poorer of the two · · ·

Pen and Ink Drawing reproduced by Photo-lithography.

could never be reproduced by any other method with the same accuracy and delicacy of finish which the zinc process gives, and which could not by wood engraving be an absolute *facsimile.*

Mr. Carl Hentschel, head of an eminent firm of photo-etchers, to whom we applied for information upon certain points in the manipulation of his process, courteously offered some very interesting statements as to the development of zinc etching. He says the process of Zinc Engraving was introduced into England about thirty years ago, but really did not "catch on," as the Yankees would say, for twenty years after; nor was there any real value attached to it from a commercial point of view until about twelve years ago, when, as Mr. Hentschel assures us, the system he adopted rendered it possible to have blocks of all kinds for newspapers, books, magazines, and journals of every description produced in such time that their

Pen and Ink Drawing, reproduced by process block.
(Same size.)

delivery could be relied upon for the most urgent publication, and, only then, the vast possibilities of the zinc process began to dawn upon publishers, and soon the method was gradually adopted for all purposes of engraving. Some idea of the extent to which it is made use of may be gathered from the fact that this firm alone delivers weekly about three thousand blocks for various publications throughout the country, and even to far-off India, where the plates of whole volumes of educational works have been despatched by this enterprising firm. To keep pace with the requirements of the times it has been found necessary recently to add largely to the facilities for the execution of half-tone blocks, using engine power to the extent of forty horse for the production of the electric light, essential for this branch of the business, so that in this respect they are practically independent of sunlight. In cases of emergency it is no unusual thing to deliver half-tone

Pen and Ink Drawing, reproduced by process block.
Slightly reduced.

blocks in five to seven hours, and Line work, from transfers, one and half hours, and in the case of having to photo the subject, two and half to three hours. This would have been impossible under the old system, trusting to daylight, and this fact, coupled with the cheaper rate of cost, has given an impetus to illustrated journalism that could hardly have been dreamt of under the old *regime*.

Under the head of photo-lithography, the initiatory stage in the making of what are termed "Process Blocks" was explained, namely, the making of photo-transfer from the original drawing—in printer's ink—for transference to the lithographic stone and printed form. The metal Zinc possesses the same or similar properties as lithographic stone, and may be used to print from in the same way. The term Zincography is applied to the process, though practically it is the same as lithography.

To convert the design upon the zinc plate

Drawn in pen and ink, reproduced by process block.

into a relief block to print with type is only one step farther—to so protect the lines of the design on the zinc plate, as to resist the corrosive action of acid, and by etching the plate, produce a relief block. For this purpose, a resinous or bituminous substance is introduced into the composition of the printing ink. Here, then, we have the lines of the design in an acid-resisting material upon the surface of a metal plate exceedingly susceptible to the action of acids. If the prepared plate is now placed in an acid bath, the entire surface of the zinc, except the protected lines, will become etched, or dissolved away, leaving the design in its integrity, with the lines standing up in relief: the etched plate has now only to be mounted upon wood to the height of type to be ready for the printer's use.

Such is a brief outline of the process in the production of LINE BLOCKS. The design

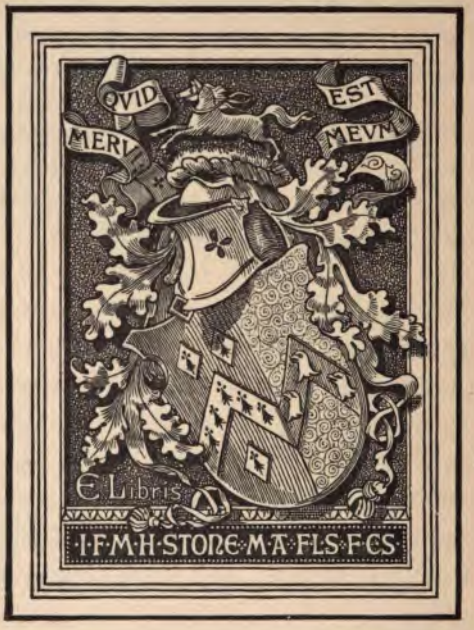
Pen and Ink Drawing, reproduced by process block.

Pen and Ink Drawing reproduced by Photo-lithography.

may be put on the metal plate in any of the following ways:—

(*a*) By direct drawing on the zinc plate.
(*b*) By a drawing on transfer paper to zinc or stone.
(*c*) By transference of a photo-transfer.
(*d*) By transfer from an engraved plate.
(*e*) By transfer from a lithographic stone.
(*f*) By direct photography upon zinc.

The most perfect work is said to be obtained by the latter method. There are many technical difficulties to be encountered in working the process, difficulties which for twenty years kept it at the experimental stage, and of little practical utility, as, for instance, after etching the plate for a short time the acid has a tendency to bite laterally as well as vertically, and so undermine and weaken the lines intended to be left standing. This is obviated by some photo etchers in using certain chemicals, and others by an ingenious manner in the working by etching in stages. This is done by re-inking and



Pen and Ink Drawing, reproduced by process block.

Reproduced by half-tone process block,
from a Monochrome Sketch, reduced in size.

dusting with bitumen, heating the plate after each "etching," which has the effect of melting and spreading the resinous or bituminous ink on the face, and slightly down the sides of the lines. Successful work is only attained by attention to the various delicate technical manipulations, which only experience can give.

HALF-TONE PROCESS BLOCKS.

The subject, whether it is a drawing, engraving, painting, or a photo print, must in each case be photographed to obtain upon the negative the texture which is the means of producing the gradations of light and dark we find in the finished block. The theory is simple enough, but the practice is extremely difficult, and one requiring great skill and care. A glass screen having cross lines ruled upon it, with perfect mechanical regularity (about seventy lines to the inch for large work, up to two hundred lines to the inch for very fine half-tone blocks, as may be

Pen and Ink Drawing, reproduced by process block.

best suited to the subject in hand). The screen is fixed in the camera between the lens and the negative to be exposed. The fine black lines of the screen are reproduced upon the negative as white lines, breaking up the picture into a series of minute square dots, of varying size according to the light and shade of the original picture. A photo-transfer is then taken as previously explained. (In Hentschel's process the secret of the prepared transfer paper is in the possession of Mr. Hentschel solely.) After being transferred to the zinc, and manipulated with certain chemicals, the plate is gradually etched until a sufficient depth has been obtained. It is then trimmed and mounted type height ready for the printer.

PEN AND INK DRAWING.

Drawings for reproduction by the modern processes of photo-lithography and photo-etching may be prepared in a variety of

Original size.

Pen and Ink Drawing, reproduced by process block in three sizes.

ways. The most frequently used is termed PEN AND INK DRAWING (often mistakenly called "*etching*," which is engraving by means of an acid). This class of work is the most popular of all, and the most easily got at by artists and amateurs; it is translated with much greater ease, and at less cost, than photographs or shaded drawings of any kind. As the term indicates, it is executed with *the pen;* many artists, however, have a predilection for *the brush* (a fine sable pencil), which, though it requires considerable practice to master its use, becomes in masterly hands a valuable instrument, capable of greater and more varied effects than the pen. Good *black ink*, and *smooth white paper* or cardboard, are the essentials. Much may be said on the style or modes of different artists in drawing, the kind or quality of the ink, the pens and paper to be used. The relative values of thick and thin, open and close lines, the

direction of the lines, etc., in producing the varied character and quality of good expressive drawing; the various textures of surfaces —roughness, smoothness, etc.—have all to be considered, more especially if the drawing

CLUB DEVICE AND EX LIBRIS.
Pen and Ink Drawing, reproduced by process block.

is made upon a larger scale, to be reduced in the photo-etching process of translation. We heartily commend the shilling handbook on Pen and Ink drawing published by Winsor and Newton. It is an excellent introduction

Reproduced by half-tone process block,
from an Aqua-Tint engraving, same size.

to the art; it gives full instructions on the best means of working, and the materials to be used.*

For HALF-TONE SHADED BLOCKS the design may be executed in washes as a china ink drawing, or in any other way. The illustrations are reproductions from various kinds of originals, as explained under each example.

Messrs. Carl Hentschel & Co., 182-3 Fleet Street, have been good enough to prepare several examples to illustrate the half-tone process; each block having been made from an original executed in a different way, as indicated by the explanatory title; and may be considered rather severe tests of what the process is capable. For these favours we are much obliged; we tender also our thanks for their kindness and courtesy in supplying much of the foregoing information.

* "The Art of Pen and Ink Drawing, commonly called Etching." By H. R. Robertson, Fellow of the Society of Painter-Etchers, Author of "The Art of Etching," etc. Winsor & Newton, Limited, London.

Pen and Ink Drawing, reproduced by process block.

HINTS TO COLLECTORS OF EX LIBRIS.

To distinguish how a book-plate may have been produced.

A lithograph or a photo-lithograph may be distinguished from a woodcut, or from a copper engraving, by the following: By the quality of the lines, whether *cut* with the graver or *etched* upon copper; *drawn with the pen* or with *the fine sable pencil*. Each has a character of handling and manner of its own by which it may be recognised. A little observation of admitted examples with the aid of a strong magnifying glass will generally resolve this.

THE DIFFERENCE IN ENGRAVED OR CUT LINES, AND ETCHED LINES.

Lines cut with the graver are invariably smooth and even, and have a clear silvery appearance; in isolated lines or cuts it will

EX LIBRIS.

Reproduced by half-tone process block,
from Coloured Design for Stained Glass Window.

be observed that the beginning of the lines are finer where the graver has entered than where it stops. Etched lines, on the contrary, do not possess the same smooth-edged rigid character as those cut with the graver; and where greater strength of line is obtained it is by deeper etching with the acid bath, and in this the difference in the quality of line is more perceptible.

TO DISTINGUISH AN IMPRESSION FROM PLATE.

In a *plate engraving* the lines are slightly *in relief* (and, if strongly engraved, or the paper thin, observable on the back). A sensitive finger will detect the stronger raised lines of the engraving. *The mark of the plate*, unless cut off, also betrays it; the engraved plate by Mr. Sherborn, facing page 27, will illustrate this.

TO DISTINGUISH A WOODCUT, OR LINE PROCESS BLOCK.

In a block the lines of the design are *indented*

slightly into the paper, which shows itself on the back of the print (unless thoroughly rolled out under heavy pressure). Close observation with the magnifying glass will show the edges of the lines to be slightly rough—by the ink from the face of the line being squeezed over the edge; in good printing this is not so apparent. A weakness with nearly all process blocks is that the edges of fine tints and outlying fine lines are apt to print heavier than they should, unless very carefully worked.

TO DISTINGUISH A LITHOGRAPH.

In a *lithograph* the surface of the paper is perfectly smooth, and not indented in any way. The examples of engraved plates printed from stone, and the litho. and photo-litho's printed in brown ink, will serve to illustrate the qualities of lithography. Unless well printed, the fine lines are apt to show weak and rotten, or to have become thick and blurred, either in transferring to the stone or by too much ink on the printing roller.

FATO PRUDENTIA MAJOR.

EX Libris VINICOMBE BEY. Colonel D'Artillerie, Topkane. Constantinople.

Example of soft-ground etching—Reproduced by half-tone process-block.

"AU REVOIR."

HAVING now rehearsed, I hope clearly and concisely, the various modes by which Ex Libris are and have been produced, and having revealed as many trade secrets as the limited space at command would allow, I beg to thank the Council of the Ex Libris Society for permission to reprint from the pages of the *Journal* the series of articles on the subject—now somewhat expanded—and for the use of the blocks by which they were illustrated. To Mr. W. H. K. Wright, F.R.Hist.Soc., the able Editor and Secretary of the Ex Libris Society (to whom all collectors are infinitely indebted), my thanks are due for his valued aid and counsel; and on whose shoulders I have now laid the further obligation of a preface. As a special favour I have requested his "library interior" plate to appear. A similar favour I have desired from Arthur Vicars, F.S.A., *Ulster King of Arms*, to whom I dedicate this little book. With the exception of these two "library interiors" and the crest plate of R. Day, F.S.A., by Sherborn, all the modern Ex Libris designs here

printed have been made by, or under the superintendence of, the writer, and executed by Marcus Ward & Co., Limited, whom I beg to thank most heartily for their kind co-operation, particularly in printing the lithographed specimens, and the use of additional blocks. I have also to thank several personal friends who have been good enough to lend me their copper plates and process blocks.

JOHN VINYCOMB, M.R.I.A.

RIVERSIDE, HOLYWOOD, CO. DOWN, 1894.

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